

**WHAT IS CLAIMED AS THE INVENTION IS:**

1. A replicating pad adapted to be gripped by a replicating device comprising:  
a generally planar body; and  
a plurality of pins extending downwardly from the body.
2. A replicating pad as claimed in claim 1 wherein all of the plurality of pins have generally the same dimensions.
3. A replicating pad as claimed in claim 2 wherein the pins are arranged in a plurality of rows and each row has a plurality of pins.
4. A replicating pad as claimed in claim 3 wherein the pins are arranged to correspond with one of a cell colony and a liquid sample.
5. A replicating pad as claimed in claim 3 wherein there are 768 pins.
6. A replicating pad as claimed in claim 3 wherein there are 1536 pins.
7. A replicating pad as claimed in claim 3 wherein there are 13,824 pins.
8. A replicating pad as claimed in claim 3 wherein there are 6144 pins.

9. A replicating pad as claimed in claim 3 wherein there are 24576 pins.

10. A replicating pad as claimed in claim 3 wherein the replicating pad is constructed by way of injection molding.

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11. A replicating pad as claimed in claim 10 wherein the replicating pad is constructed from polystyrene.

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12. A replicating pad as claimed in claim 3 wherein the replicating pad is designed to be used once and then disposed of.

13. A replicating pad as claimed in claim 3 wherein the replicating pad is washed for reuse.

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14. A replicating pad as claimed in claim 3 wherein the planar body is 112 mm by 74 mm.

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15. A replicating device adapted to be used in association with a replicating pad having a plurality of pins extending downwardly, the replicating device comprising:

a gripper adapted to grip the replicating pad;

a means for aligning the replicating pad in the gripper; and

a means for pushing the replicating pad downwardly.

16. A replicating device as claimed in claim 15 wherein the pushing means includes an actuator and a pressure regulator.

5 17. A replicating device as claimed in claim 16 further including a pad locating device.

18. A replicating device as claimed in claim 17 wherein the pad locating device has a plurality of projections extending upwardly therefrom.

10 19. A replicating device as claimed in claim 18 wherein the projections include conical pins and blocks.

15 20. A replicating device as claimed in claim 19 further including a pad container adapted to hold a plurality of replicating pads.

21. A replicating device as claimed in claim 15 wherein the gripper includes a vacuum to hold the replicating pad to the gripper.

20 22. A method of replicating cell colonies comprising the steps of:  
picking up a replicating pad having a plurality of pins extending  
downwardly therefrom;  
lowering the replicating pad onto a cell colony;

pressing the replicating pad into the cell colony such that the pins of the replicating pad engage the cell colony;

lifting the replicating pad from the cell colony;

lowering the replicating pad onto an agar plate;

5 pressing the replicating pad into the agar plate such that the pins of the replicating pad engage the agar plate;

removing the replicating pad from the agar plate; and

releasing the replicating pad into a predetermined position.

10 23. A method of replicating cell colonies as claimed in claim 22 further including the step of aligning the replicating pad in a gripper.

24. A method of replicating cell colonies as claimed in claim 23 further including the step of aligning the replicating pad with the agar plate.

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25. A method of replicating cell colonies as claimed in claim 24 wherein the replicating pad is released into a disposal unit.

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26. A method of replicating cell colonies as claimed in claim 22 wherein the replicating pad is a first replicating pad and the replicating pad is lowered at a defined location and further including a step of providing a second replicating pad and repeating the steps with a second replicating pad and wherein the second replication pad is lowered at a location offset from the defined location.